

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1 (currently amended): A line light source system comprising

a line light source,

an optical means which converges the light bundles emitted from the line light source in a direction perpendicular to the longitudinal direction of the line light source, [[and]]

a first pinhole array which limits the angle of divergence of the light bundles emitted from the line light source with respect to the optical axis of the optical means in the longitudinal direction of the line light source, wherein the first pinhole array is aligned with an optical axis of plural light emitting elements of the line light source, and

a second pinhole array disposed to have pinholes in alignment with pinholes of the first pinhole array.

2. (original): A line light source system as defined in Claim 1 in which the line light source comprises a number linearly arranged light emitting elements.

3. (original): A line light source system as defined in Claim 2 in which said light emitting element is an LED.

4. (original): A line light source system as defined in Claim 1 which is for projecting a reading light beam onto an electrostatic recording medium which stores image information as an electrostatic latent image upon exposure to light bearing thereon image information and

generates an electric current according to the image information upon exposure to the reading light.

5. (original): A line light source system as defined in Claim 1 which is for projecting a reading light beam onto a stimuable phosphor sheet which stores the image information upon exposure to light bearing thereon image information and emits light according to the image information stored therein upon exposure to the reading light.

6. (original): A line light source system comprising
a light emitting element array comprising a number of linearly arranged light emitting elements and
a cylindrical lens which converges the divergent light bundles emitted from the respective light emitting elements only in a direction perpendicular to the direction in which the light emitting elements are arranged so that the divergent light bundles are converged on a line-like area on a surface to be exposed to the light emitted from the line light source, wherein the improvement comprises

an optical element which limits the angle of divergence ϕ of light traveling toward the surface within the range defined by formula

$$2 \times \cos^{-1} \left(1 - \frac{z}{D} \right) \geq \phi$$

wherein D represents the distance between the front imaging point and the back focus of the cylindrical lens, and z represents a desired focal depth.

7. (original): A line light source system as defined in Claim 6 in which said light emitting element array is an LED array.

8. (original): A line light source system as defined in Claim 6 which is for projecting a reading light beam onto an electrostatic recording medium which stores image information as an electrostatic latent image upon exposure to light bearing thereon image information and generates an electric current according to the image information upon exposure to the reading light.

9. (original): A line light source system as defined in Claim 6 which is for projecting a reading light beam onto a stimulable phosphor sheet which stores the image information upon exposure to light bearing thereon image information and emits light according to the image information stored therein upon exposure to the reading light.

10. (original): A line light source system as defined in Claim 6 in which said optical element is a pinhole array.

11. (original): A line light source system as defined in Claim 6 in which said optical element is a refractive index profile type lens array.

12 (new): The line light source of claim 1, further comprising a slit plate having an opening formed in a longitudinal direction of the line light source, disposed between the light source and the first pinhole array.

13 (new): The line light source of claim 12, wherein the first pinhole array comprises an anti-reflection layer.

14 (new): A line light source system comprising
a line light source,

an optical means which converges the light bundles emitted from the line light source in a direction perpendicular to the longitudinal direction of the line light source, and

a pinhole array which limits the angle of divergence of the light bundles emitted from the line light source to substantially 10° or less with respect to each direction.

15 (new): The line light source of claim 14, wherein the pinholes have a rectangular shape.